

G. M. WARR.  
Surcingle.

No. 219,372.

Patented Sept. 9, 1879.

Fig. 1.

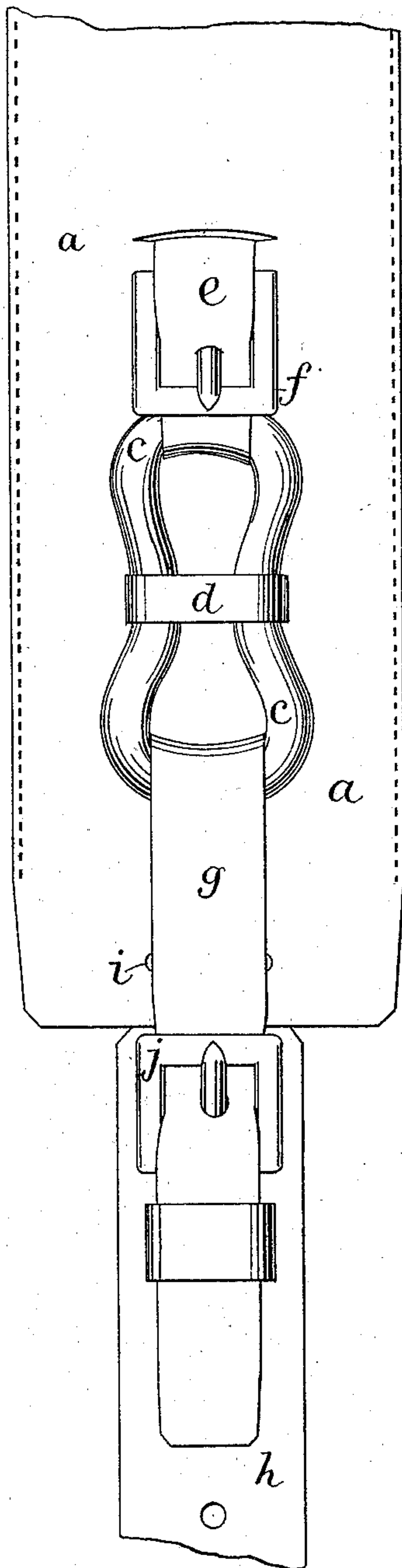
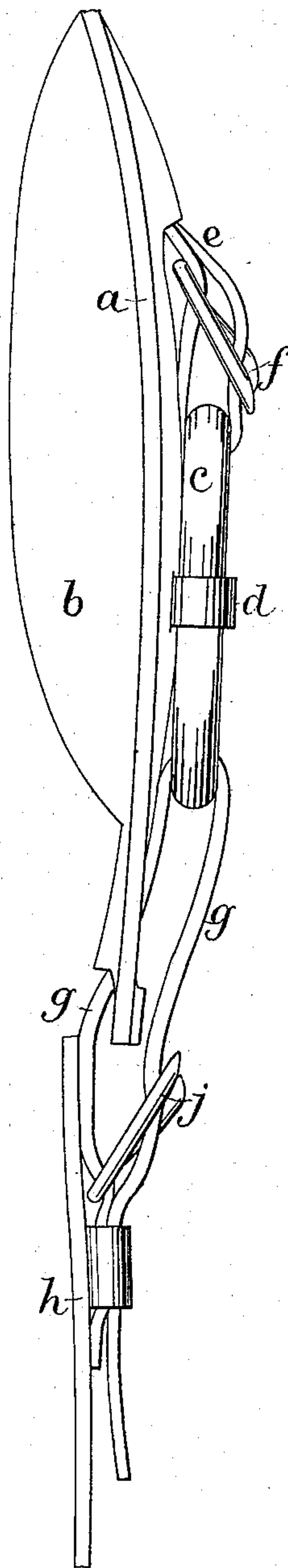


Fig. 2.



Witnesses.  
Jos. P. Livermore  
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# UNITED STATES PATENT OFFICE.

GEORGE M. WARR, OF CHELSEA, MASSACHUSETTS.

## IMPROVEMENT IN SURCINGLES.

Specification forming part of Letters Patent No. 219,372, dated September 9, 1879; application filed August 2, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE M. WARR, of Chelsea, county of Middlesex, State of Massachusetts, have invented an Improvement in Surcingles, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to surcingles of that class wherein the surcingle is provided with a spring or springs which enable it to yield to the body of the horse.

In this present form of my invention I employ an india-rubber ring, located at the outer side or face of the back-pad, one part of the said ring being connected with the said back-pad by a loop, while another part of the said ring is engaged by one end of the under or girth strap.

Figure 1 represents, in side view, a sufficient portion of a surcingle to illustrate my present improvements, and Fig. 2 an edge view of Fig. 1.

The back-pad *a*, of leather, has an inner portion, *b*, also preferably of leather, the space between the two being stuffed to usual shape, as shown in Fig. 2.

The spring *c* is herein shown as made of india-rubber, in the form of a ring, it being bent somewhat together and confined at or near its center under a guide-loop, *d*, attached to the back-pad. One portion of this india-rubber ring is engaged and held by means of a loop, *e*, and buckle *f*, attached to the back-pad, and another or lower portion of this spring is embraced by the narrow strap *g*, which is connected at one end with the under or belly girth, *h*, made of leather or webbing, while the other end of the strap *g*, extended through a slot, *i*, in the back-pad, and thence through

and about the spring, is connected with the buckle *j*, also attached to the girth *h*.

By this construction it will be seen, as the girth or surcingle is drawn closely about the body of the horse, that the india-rubber spring yields or elongates, while the loop *d* holds and directs it.

This spring, made as a round rubber ring, is very strong and easily applied to a surcingle, and in case it is broken a new ring may be easily and quickly substituted for the old one.

The point to which the ring may be extended is limited by the slot *i* in the back-pad, as the back-pad near the said slot limits further movement of the part *g*, looped about it and the spring, and consequently stops the further elongation of the spring.

I am aware that flat straps of india-rubber have been employed in surcingles.

I claim—

1. The combination, with the back-pad and under girth, of an interposed flexible ring, as shown and described.

2. The back-pad, the flexible ring or loop, and the strap and buckle to attach the ring or loop to the back-pad, combined with the lower girth and its end strap, *g*, extended through a guide slot or opening at the lower end of the pad and through the ring or loop, to limit the extension of the said loop, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE M. WARR.

Witnesses:

CHAS. E. HIBBARD,  
J. T. CRONIN.